



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/634,962	08/05/2003	Rajeev Sharma	AI-0010-VTE	7106
7590	03/30/2007		EXAMINER	
Rajeev Sharma Advanced Interfaces, Inc. Suite 104 403 South Allen Street State College, PA 16801			BECKER, SHASHI KAMALA	
			ART UNIT	PAPER NUMBER
			2179	
			MAIL DATE	DELIVERY MODE
			03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Supplemental Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/634,962	SHARMA ET AL.	
	Examiner	Art Unit	
	Shashi K. Becker	2179	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS**. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1.  This communication is responsive to 3/12/07.
2.  The allowed claim(s) is/are \_\_\_\_\_.
3.  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a)  All
  - b)  Some\*
  - c)  None
 of the:
  1.  Certified copies of the priority documents have been received.
  2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3.  Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4.  A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5.  CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a)  including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1)  hereto or 2)  to Paper No./Mail Date \_\_\_\_\_.
  - (b)  including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6.  DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

#### Attachment(s)

1.  Notice of References Cited (PTO-892)
2.  Notice of Draftsperson's Patent Drawing Review (PTO-948)
3.  Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4.  Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5.  Notice of Informal Patent Application
6.  Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7.  Examiner's Amendment/Comment
8.  Examiner's Statement of Reasons for Allowance
9.  Other Response to Rule 312 Amendment.

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application is amended as follows:

*Claim 16 (line 2), replace "the embodiment" with --an embodiment--.*

*(line 3,) replace "attraction means" with --means for attracting--.*

*(line 5), replace "said invention" with --said method--.*

*Claim 32 (line 3),replace "the embodiment" with --an embodiment--.*

*(line 4,) replace "attraction means" with --means for attracting--.*

*(line 6), replace "said invention" with --said method--.*

*Specification: Page 1, lines 2-4, after the title, delete and substitute the following:*

**-CROSS-REFERENCE TO RELATED APPLICATIONS**

*This application is entitled to the benefit of Provisional Patent Application Ser.*

*Nr. 60/409,435, filed Sep. 10, 2002.*

*Proposed change of Claims 31-36 is denied. Claims 30-36 requires the change of all "apparatus" with "system" in order for allowable subject matter.*

### **REASONS FOR ALLOWANCE**

The following is an examiner's statement of reasons for allowance: Independent claims 1 and 30, when considered as a whole in light of the specification, is allowable over the prior art of record. Specifically, prior art of record fails to teach or suggest the limitations executing an image capturing system and a set of computer vision algorithms for user sensing and hand motion sensing; whereby said image-capturing system divides its field of view into a plurality of capture zones, and apply said set of computer vision algorithms within said capture zones to sense said user and its hand motion and, whereby said user is promoted or demoted depending on the coordinate of said user's position in said plurality of capture zones of said image-capturing system.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shashi K. Becker whose telephone number is 571-272-8919. The examiner can normally be reached on Mon-Fri 8:30-5.

Art Unit: 2179

If attempts to reach the Examiner by telephone are unsuccessful, the examiners supervisor, Weilun Lo can be reached on 571-272-4847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



WEILUN LO  
SUPERVISORY PATENT EXAMINER

<b>Response to Rule 312 Communication</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/634,962	SHARMA ET AL.	
	<b>Examiner</b> Shashi K. Becker	<b>Art Unit</b> 2179	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

1.  The amendment filed on 12 March 2007 under 37 CFR 1.312 has been considered, and has been:

- a)  entered.
- b)  entered as directed to matters of form not affecting the scope of the invention.
- c)  disapproved because the amendment was filed after the payment of the issue fee.  
Any amendment filed after the date the issue fee is paid must be accompanied by a petition under 37 CFR 1.313(c)(1) and the required fee to withdraw the application from issue.
- d)  disapproved. See explanation below.
- e)  entered in part. See explanation below.

*For further consideration:*

*Claim 16 (line 2), replace "the embodiment" with --an embodiment--.  
(line 3,) replace "attraction means" with --means for attracting--.  
(line 5), replace "said invention" with --said method--.*

*Claim 32 (line 3),replace "the embodiment" with --an embodiment--.  
(line 4,) replace "attraction means" with --means for attracting--.  
(line 6), replace "said invention" with --said method--.*

*Specification: Page 1, lines 2-4, after the title, delete and substitute the following:*

**-CROSS-REFERENCE TO RELATED APPLICATIONS**

*This application is entitled to the benefit of Provisional Patent Application Ser. Nr. 60/409,435, filed Sep. 10, 2002.*

*Proposed change of Claims 31-36 is denied. Claims 30-36 requires the change of all "apparatus" with "system" in order for allowable subject matter.*



WEILUN LO  
SUPERVISORY PATENT EXAMINER